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APPLICATION NO.	FILI	ING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.	
10/700,874	11/04/2003		Seppo Arijoki	QUE04 P-317	5946	
277	7590	03/23/2006		EXAMINER		
		COOPER DEWI	ENGLISH, EVAN JAMES			
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GRAND RAPIDS, MI 49501				3652	<u></u>	

DATE MAILED: 03/23/2006

Please find below and/or attached an Office communication concerning this application or proceeding.

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	Application No.	Applicant(s)				
•	10/700,874	ARIJOKI ET AL.				
Office Action Summary	Examiner	Art Unit				
	Evan English	3652				
The MAILING DATE of this communication appears on the cover sheet with the correspondence address Period for Reply						
A SHORTENED STATUTORY PERIOD FOR REPLY WHICHEVER IS LONGER, FROM THE MAILING DA - Extensions of time may be available under the provisions of 37 CFR 1.1 after SIX (6) MONTHS from the mailing date of this communication. - If NO period for reply is specified above, the maximum statutory period of the provision	ATE OF THIS COMMUNICATION 36(a). In no event, however, may a reply be tim will apply and will expire SIX (6) MONTHS from a cause the application to become ABANDONE	N. nely filed the mailing date of this communication. D (35 U.S.C. § 133).				
Status						
1) Responsive to communication(s) filed on 11/0-	<u>4/2003</u> .					
2a) ☐ This action is FINAL . 2b) ☑ This	This action is FINAL . 2b)⊠ This action is non-final.					
	Since this application is in condition for allowance except for formal matters, prosecution as to the merits is					
closed in accordance with the practice under Ex parte Quayle, 1935 C.D. 11, 453 O.G. 213.						
Disposition of Claims		•				
4) ☐ Claim(s) 1-20 is/are pending in the application 4a) Of the above claim(s) is/are withdray 5) ☐ Claim(s) is/are allowed. 6) ☐ Claim(s) 1-20 is/are rejected. 7) ☐ Claim(s) is/are objected to. 8) ☐ Claim(s) are subject to restriction and/or	wn from consideration.					
Application Papers						
9) The specification is objected to by the Examine 10) The drawing(s) filed on is/are: a) acc Applicant may not request that any objection to the Replacement drawing sheet(s) including the correct 11) The oath or declaration is objected to by the Example 11.	epted or b) objected to by the drawing(s) be held in abeyance. Settion is required if the drawing(s) is ob	e 37 CFR 1.85(a). jected to. See 37 CFR 1.121(d).				
Priority under 35 U.S.C. § 119						
 12) Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f). a) All b) Some * c) None of: 1. Certified copies of the priority documents have been received. 2. Certified copies of the priority documents have been received in Application No 3. Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)). * See the attached detailed Office action for a list of the certified copies not received. 						
Attachment(s)						
1) Notice of References Cited (PTO-892) 4) Interview Summary (PTO-413)						
 2) Notice of Draftsperson's Patent Drawing Review (PTO-948) 3) Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08 Paper No(s)/Mail Date 2/17/2004 	Paper No(s)/Mail D 5) Notice of Informal S 6) Other:	ate Patent Application (PTO-152)				

DETAILED ACTION

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Priority

1. Acknowledgment is made of applicant's claim for foreign priority based on an application filed in the European Patent Office on 11/08/2002. It is noted, however, that applicant has not filed a certified copy of the European application as required by 35 U.S.C. 119(b).

Claim Rejections - 35 USC § 112

- 2. The following is a quotation of the second paragraph of 35 U.S.C. 112:

 The specification shall conclude with one or more claims particularly pointing out and distinctly claiming the subject matter which the applicant regards as his invention.
- 3. Claim 18 is rejected under 35 U.S.C. 112, second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter which applicant regards as the invention. It is unclear what "independently" means in reference to raising the loading platform and transfer bridge by using at least one power mechanism.

Claim Rejections - 35 USC § 102

4. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless -

⁽b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

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5. Claims 1, 8, 9, and 11-16 are rejected under 35 U.S.C. 102(b) as being anticipated by Bryan (US 4,077,532).

With respect to claim 1, Bryan discloses a method for loading an aircraft having a hold disposed at a predetermined elevation (see Figures 7c, 7b, and 7a in that order). This method providing a first loading platform 32 having a transfer for moving cargo in a horizontal direction 56 and a powered lift 42 to raise and lower the first loading platform. The load is positioned on the first loading platform at the first elevation (Fig 7c, by the lift truck 72). The first loading platform 32 is shifted upwardly to the second elevation to lift the load (Fig 7c, the lifts 42 engage to raise the platform so that the legs 71 clear the ground). This method providing a second loading platform 26 having a transfer for moving cargo in a horizontal direction (Fig 7b, see the rollers mounted on elevator 26) and a powered lift 28 to raise and lower the second loading platform. The load 30b is transferred from the first loading platform 32 to the second loading platform 26 (Fig 7b shows the load 30b being transferred from second platform 26 to first platform 32, but this process is easily reversed and discussed in the specification in the last paragraph of column 6 and continuing in the next column). The second loading platform 26 is shifted upwardly to the hold elevation (Fig 7a) and the load is transferred from the second loading platform in to the hold of the aircraft (column 7, lines 9-14).

With respect to claim 8, Bryan discloses the method set forth in claim 1 as discussed above, where the first loading platform providing step includes supporting the first loading platform 32 on a first aircraft loading device 40. The second loading platform providing step also includes supporting the second loading platform 26 on a

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second aircraft loading device (the platform 26 is supported on a wheeled frame as shown in Figs 1 and 7a-7c).

With respect to claim 9, Bryan discloses the method in claim 1 as discussed above, including having the first and second aircraft loading devices are separate vehicles (Figs 7a-7c show the first device 40 driving away from the second device 26 to get unloaded).

With respect to claim 11, Bryan discloses a method for unloading an aircraft 20. A second loading platform 26 is provided having a transfer for moving cargo in a horizontal direction (see the rollers mounted on the platform 26 in Fig 7b) and a powered lift 28 to raise and lower the second loading platform. A load 30b is positioned on the second loading platform at the predetermined hold elevation. The second loading platform 26 is shifted downwardly to the second elevation to lower the load 30b. This method provides a first loading platform 32 having a transfer 56 for moving cargo in a horizontal direction and a powered lift 42 to raise and lower the first loading platform 32. The load 30b is transferred from the second loading platform 26 at the second elevation to the first loading platform 32 at the second elevation. The first loading platform 32 is shifted downwardly from the second elevation to the first elevation, where the load 30b is removed from the first loading platform (as shown in Fig 7c).

With respect to claim 12, Bryan discloses a movable aircraft cargo handling apparatus for loading and unloading an aircraft. This apparatus comprises a first movable aircraft cargo handling device (the conventional elevator platform 32 and its wheeled frame, as shown in Figs 7a & 7b) having a loading platform 32 with a transfer

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56 for moving cargo in a horizontal direction and a powered lift 28 to raise and lower the loading platform 32 between the load level of an aircraft 20 and the load level of a loading platform of another loading device 40.

With respect to claim 13, Bryan discloses a movable aircraft cargo handling apparatus in claim 12, as discussed above, including a second movable aircraft cargo handling device 40 functionally separate from the first movable aircraft cargo handling device.

With respect to claim 14, Bryan discloses a movable aircraft cargo handling apparatus in claim 13, where the second movable cargo handling device 40 defines another loading device.

With respect to claim 15, Bryan discloses a movable aircraft cargo handling apparatus in claim 14, where the first and second movable aircraft cargo handling devices (the conventional elevator platform and its wheeled frame and transporter 40) each include a vehicle.

With respect to claim 16, Bryan discloses a movable aircraft cargo handling apparatus in claim 15, where the first device 26 forms an adapter between the aircraft 20 and the second device 40.

Claim Rejections - 35 USC § 103

6. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

⁽a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negatived by the manner in which the invention was made.

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7. Claim 2 is rejected under 35 U.S.C. 103(a) as being unpatentable over Bryan. Bryan is silent on the height of the plane. Using the device on different sized planes would mean that the distances the platform is moved would vary. Therefore, it would be obvious to one having ordinary skill in the art at the time the invention was made to raise the second loading platform a distance of 50-100 percent of the distance between the first and second elevations in order to allow the device to work with a variety of plane sizes.

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8. Claims 3-7, 10, and 17-20 are rejected under 35 U.S.C. 103(a) as being unpatentable over Bryan in view of Moore et al. (US 5,525,019).

With respect to claim 3, Bryan discloses a method in claim 2 as discussed above. Bryan also discloses a second loading platform shifting step (Fig 7a & 7b), which would be capable of raising the platform 26 a distance in the range of 4.00 – 8.50 meters above ground level. Bryan does not disclose a first loading platform shifting step that would be capable of raising a first loading platform from a height adjacent to the ground to a height of around six meters above ground level.

Moore et al. discloses a first loading platform shifting step that includes raising the first loading platform 111 from a height adjacent to the ground to a height of around six meters above ground level (see Fig 3 and column 3, lines 33-37). The examiner notes that 228 inches is approximately 5.79 meters.

It would have been obvious to one having ordinary skill in the art at the time the invention was made to include the first loading platform shifting step as taught by Moore

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et al. to the method of loading aircraft of Bryan, in order to allow loads to transferred to the first loading platform without being lifted far from the ground level.

With respect to claim 4, Bryan discloses that the first loading platform 32 is supported on the first aircraft loading device 40 by the stand 70. Bryan further discloses that the second loading platform 26 is supported on the second aircraft loading device (platform 26 and its attached wheeled frame). Figures 1, 7a, and 7b disclose that a wheeled frame and a hydraulic cylinder 28 support the second loading platform.

With respect to claim 5, Bryan discloses that the first and second aircraft loading devices are separate vehicles. The first aircraft loading device is the transporter 40 and the second aircraft loading device is the platform 26 with its depending wheeled frame (see Figs 1, 7a, and 7b).

With respect to claim 6, Bryan does not disclose that the second loading platform transferring step provides a transfer bridge to transfer the load from the second loading platform to the aircraft hold.

Moore et al. discloses a transfer bridge 110 that is mounted on the second aircraft loading device (see Fig 3). Moore further discloses that this forward platform is included for adjusting to an aircraft cargo door (see column 1, lines 24-25).

It would have been obvious to one having ordinary skill at the time the invention was made to have included the transfer bridge as taught by Moore et al. to the second platform transferring step of Bryan, in order to allow the ease of transfer between the second loading platform and a variety of aircraft cargo doors.

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With respect to claim 7, Bryan discloses a method in claim 1 as discussed above. Bryan also discloses a second loading platform shifting step (Fig 7a & 7b), which would be capable of raising the platform 26 a distance in the range of 4.00 – 8.50 meters above ground level. Bryan does not disclose a first loading platform shifting step that would be capable of raising a first loading platform from a height adjacent to the ground to a height of around six meters above ground level.

Moore et al. discloses a first loading platform shifting step that includes raising the first loading platform 111 from a height adjacent to the ground to a height of around six meters above ground level (see Fig 3 and column 3, lines 33-37). The examiner notes that 228 inches is approximately 5.79 meters.

It would have been obvious to one having ordinary skill in the art at the time the invention was made to include the first loading platform shifting step as taught by Moore et al. to the method of loading aircraft of Bryan, in order to allow loads to transferred to the first loading platform without being lifted far from the ground level.

With respect to claim 10, Bryan does not disclose that the second loading platform transferring step provides a transfer bridge to transfer the load from the second loading platform to the aircraft hold.

Moore et al. discloses a transfer bridge 110 that is mounted on the second aircraft loading device (see Fig 3). Moore further discloses that this forward platform is included for adjusting to an aircraft cargo door (see column 1, lines 24-25).

It would have been obvious to one having ordinary skill at the time the invention was made to have included the transfer bridge as taught by Moore et al. to the second

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platform transferring step of Bryan, in order to allow the ease of transfer between the second loading platform and a variety of aircraft cargo doors.

With respect to claim 17, Bryan is unclear on the specifics of how the second loading platform is raised and lowered and the first loading platform is lifted using hydraulic jacks.

Moore et al. discloses that the second loading platform is elevated and lowered from the support frame by scissor beams (see column 1, lines 27-31 and see Fig 3, scissor beams 124). Moore et al. further discloses that the scissor beams allow the loading platform to be raised and lowered within the platform vertical space (see column 1, lines 27-31), thus saving space.

It would have been obvious to one having ordinary skill in the art at the time the invention was made to have included the scissor beams as taught by Moore et al. to the loading platform of Bryan, in order to raise and lower the platform within its individual vertical space.

With respect to claim 18, Bryan does not disclose a transfer bridge displaceable from the frame of the loading device and being capable of docking adjacent to the aircraft and including at least one power mechanism for independently raising and lowering the transfer bridge.

Moore et al. discloses a transfer bridge 110 which is displaceable from the frame of the loading device by scissor beams 124 and which is capable of docking adjacent to the aircraft. This transfer bridge also includes at least one power mechanism (scissor

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beams 124 and cylinder piston 141) for independently raising and lowering the transfer bridge.

It would have been obvious to one having ordinary skill at the time the invention was made to have include the transfer bridge including its power mechanism as taught by Moore et al. to the cargo handling apparatus of Bryan, in order to facilitate the transfer of loads between the aircraft cargo hold and the second loading platform.

With respect to claim 19, Bryan does not disclose a transfer bridge that includes telescoping power mechanisms.

Moore et al. discloses a transfer bridge 110 that includes a telescoping power mechanism 141. Moore et al. further discloses that the telescoping power mechanism provides a greater lift height (see column 3, lines 39-42).

It would have been obvious to one having ordinary skill in the art at the time the invention was made to have included telescoping power mechanism on the transfer bridge as taught by Moore et al to the cargo loading device of Bryan, in order to provide a greater lift height.

With respect to claim 20, Bryan does not disclose a transfer bridge with power mechanisms to extend, retract, or tilt in any direction.

Moore et al. discloses a transfer bridge with power mechanisms to raise and lower the bridge. Moore et al. further discloses that the advantage of the transfer bridge is to allow adjustment of the cargo loading device to the aircraft cargo door (see column 1, lines 24-27). Moore et al. does not disclose power mechanisms to extend, retract, or tilt the transfer bridge.

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It would have been obvious to one having ordinary skill in the art at the time the invention was made to include additional power mechanisms to extend, retract, or tilt the transfer bridge as taught by Moore et al. to the cargo loading device of Bryan, in order to further facilitate the adjustment of the transfer bridge to the aircraft cargo door.

9. The prior art made of record and not relied upon is considered pertinent to applicant's disclosure.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Evan English whose telephone number is (571) 272-8971. The examiner can normally be reached on 8:30 a.m. to 5:00 p.m., Monday through Friday.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Eileen Lillis can be reached on (571) 272-6928. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see http://pair-direct.uspto.gov. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

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